

CLAIMS

What is claimed is:

1. A method for effecting PN code sequence changes, the method comprising:

determining an interceptor threat level;

determining a first transmitter PN code sequence associated with said interceptor threat level;

encoding a first transmitter PN signal with the first transmitter PN code sequence;

transmitting the first transmitter PN encoded signal, wherein transmitting the first transmitter PN encoded signal further comprises transmitting the first transmitter PN encoded signal during a first transmitter time frame;

receiving the first transmitter PN encoded signal, wherein receiving the first transmitter PN encoded signal further comprises receiving the first transmitter PN encoded signal during a first receiver time frame; and

PN decoding the first transmitter PN encoded signal.

2. A method as in claim 1 wherein determining the first transmitter PN code sequence associated with said interceptor threat level further comprises:

changing the first transmitter PN code sequence to a second transmitter PN code sequence;

encoding a second transmitter PN signal with the second transmitter PN code sequence; and

transmitting the second transmitter PN encoded signal, wherein transmitting the second transmitter PN encoded signal further comprises transmitting the second transmitter PN encoded signal during a second time frame.

3. A method as in claim 2 wherein the first transmitter PN code sequence comprises substantially a six millisecond time frame.

4. A method as in claim 2 wherein the second transmitter PN code sequence comprises substantially a six millisecond time frame.

5. A method as in claim 2 wherein changing the first transmitter PN code sequence to the second transmitter PN code sequence comprises:

correlating an integer variable N to said interceptor threat level; and

phase shifting the first transmitter PN code sequence N chips to form the second transmitter PN code sequence.

6. A method as in claim 1 wherein PN decoding the first transmitter PN encoded signal comprises:

correlating the first transmitter PN encoded signal with a first receiver PN code sequence, wherein the first receiver PN code sequence is associated with said interceptor threat level.

7. A method as in claim 6 wherein correlating the first transmitter PN encoded signal with the first receiver PN code sequence further comprises correlating the first transmitter PN encoded signal with the first receiver PN code sequence during the first receiver time frame.

8. A method as in claim 6 wherein PN decoding the first transmitter PN encoded signal further comprises:

correlating the first transmitter PN encoded signal with a second receiver PN code sequence, wherein the second receiver PN code sequence is associated with said interceptor threat level.

9. A method as in claim 8 wherein correlating the first transmitter PN encoded signal with the second receiver PN code sequence further comprises correlating the first transmitter PN encoded signal with the second receiver PN code sequence during the first receiver time frame.

10. A method as in claim 9 wherein correlating the first transmitter PN encoded signal with the second receiver PN code sequence during the first receiver time frame further comprises correlating the first transmitter PN encoded signal with the second receiver PN code sequence during a subset time frame of the first receiver time frame.

11. A communications system, the communications system comprising:

a transmitter, wherein the transmitter comprises:

a transmitter controller adapted to determine an interceptor threat level;

a first transmitter PN generator adapted to generate a first transmitter PN code sequence associated with said interceptor threat level;

a transmitter modulator adapted to encode a first transmitter PN signal with the first transmitter PN code sequence;

a transmitter antenna adapted to transmit the first transmitter PN encoded signal, wherein the transmitter antenna adapted to transmit the first transmitter PN encoded signal further comprises:

the transmitter antenna adapted to transmit the first transmitter PN encoded signal during a first transmitter time frame;

a receiver, the receiver comprising:

a receiver antenna adapted to receive the first transmitter PN encoded signal during a first receiver time frame; and

a receiver demodulator adapted to PN decode the first transmitter PN encoded signal.

12. A communications system as in claim 11 further comprises:

a second transmitter PN generator for generating a second transmitter PN code;

13. A communications system as in claim 12 wherein the receiver demodulator adapted to PN decode the first transmitter PN encoded signal further comprises:

a first correlator adapted to correlate the first transmitter PN encoded signal with the first transmitter PN code sequence; and

a first threshold detector coupled to the first correlator, wherein the first threshold detector is adapted to detect a PN correlated signal from the first correlator.

14. A communications system as in claim 13 wherein the receiver demodulator adapted to PN decode the first transmitter PN encoded signal further comprises:

a second correlator adapted to correlate the first transmitter PN encoded signal with the second transmitter PN code;

a second threshold detector coupled to the second correlator, wherein the second threshold detector is

adapted to detect a PN correlated signal from the second correlator.

15. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a for effecting PN code sequence changes, the instructions comprising:

determining an interceptor threat level;

determining a first transmitter PN code sequence associated with said interceptor threat level;

encoding a first transmitter PN signal with the first transmitter PN code sequence; and

transmitting the first transmitter PN encoded signal, wherein transmitting the first transmitter PN encoded signal further comprises transmitting the first transmitter PN encoded signal during a first transmitter time frame.

16. A program storage device as in claim 15 wherein instructions determining the first transmitter PN code sequence associated with said interceptor threat level further comprises:

changing the first transmitter PN code sequence to a second transmitter PN code sequence;

encoding a second transmitter PN signal with the second transmitter PN code sequence; and

transmitting the second transmitter PN encoded signal, wherein transmitting the second transmitter PN encoded signal further comprises transmitting the second transmitter PN encoded signal during a second time frame.

17. program storage device as in claim 15 wherein instructions changing the first transmitter PN code sequence to the second transmitter PN code sequence comprises:

correlating an integer variable N to said interceptor threat level; and

phase shifting the first transmitter PN code sequence N chips to form the second transmitter PN code sequence.

18. A program storage device as in claim 15 further tangibly embodying a program of instructions executable by the machine for determining PN code sequence changes, the instructions comprising:

receiving the first transmitter PN encoded signal, wherein receiving the first transmitter PN encoded signal further comprises receiving the first transmitter PN encoded signal during a first receiver time frame; and

PN decoding the first transmitter PN encoded signal, wherein PN decoding comprises correlating the first transmitter PN encoded signal with a first receiver PN code sequence, wherein the first receiver PN code

sequence is associated with said interceptor threat level, wherein correlating the first transmitter PN encoded signal with the first receiver PN code sequence further comprises:

correlating the first transmitter PN encoded signal with the first receiver PN code sequence during the first receiver time frame.

19. A program storage device as in claim 18 further comprising:

correlating the first transmitter PN encoded signal with a second receiver PN code sequence, wherein the second receiver PN code sequence is associated with said interceptor threat level, wherein correlating the first transmitter PN encoded signal with the second receiver PN code sequence further comprises:

correlating the first transmitter PN encoded signal with the second receiver PN code sequence during the first receiver time frame.